

DEPARTMENT of ENVIRONMENTAL SERVICES  
Water Division - Watershed Management Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: ROBBINS POND	Lake Area (ha):	14.97
Town: RINDGE	Maximum depth (m):	2.0
County: Cheshire	Mean depth (m):	0.9
River Basin: Connecticut	Volume (m <sup>3</sup> ):	136500
Latitude: 42°43'01" N	Relative depth:	0.5
Longitude: 72°03'20" W	Shore configuration:	1.17
Elevation (ft): 1031	Areal water load (m/yr):	32.12
Shore length (m): 1600	Flushing rate (yr <sup>-1</sup> ):	35.20
Watershed area (ha): 904.4	P retention coeff.:	0.42
% watershed ponded: 0.0	Lake type:	natural w/dam

BIOLOGICAL:

10 February 1999

2 September 1998

DOM. PHYTOPLANKTON (% TOTAL)	#1	NO WINTER PLANKTON	MALLOMONAS 75%
	#2	ANALYZED	DINOBYRON 25%
	#3		
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			16.78
DOM. ZOOPLANKTON (% TOTAL)	#1		KELICOTTIA 94%
	#2		
	#3		
ROTIFERS/LITER			13516
MICROCRUSTACEA/LITER			291
ZOOPLANKTON ABUNDANCE (#/L)			13807
VASCULAR PLANT ABUNDANCE			Very abundant
SECCHI DISK TRANSPARENCY (m)			0.8
BOTTOM DISSOLVED OXYGEN (mg/L)		9.1	4.9
BACTERIA (E. coli, #/100 ml)	#1		< 1
	#2		
	#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None  
Hypolimnion volume (m<sup>3</sup>) : None  
Anoxic volume (m<sup>3</sup>) : None

**CHEMICAL:**

Lake: ROBBINS POND

Town: RINDGE

	10 February 1999		2 September 1998		
DEPTH (m)	1.0		1.0		
pH (units)	4.9		5.5		
A.N.C. (Alkalinity)	-0.2		1.1		
NITRATE NITROGEN	0.12		< 0.05		
TOTAL KJELDAHL NITROGEN	0.20		0.60		
TOTAL PHOSPHORUS	0.008		0.022		
CONDUCTIVITY ( $\mu$ mhos/cm)	77.6		40.3		
APPARENT COLOR (cpu)	40		140		
MAGNESIUM			0.40		
CALCIUM			1.6		
SODIUM			4.7		
POTASSIUM			0.54		
CHLORIDE	15		7		
SULFATE	7		3		
TN : TP	40		27		
CALCITE SATURATION INDEX			5.6		

All results in mg/L unless indicated otherwise

**TROPHIC CLASSIFICATION: 1998**

D.O. S.D. PLANT CHL TOTAL CLASS

**	5	6	3	14	Eutro.
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**COMMENTS:**

1. aka Harrington Pond.
2. Robbins Pond was previously surveyed and classified in 1991 and was rated eutrophic in both years.
3. No public access; must travel through a field and section of woods to reach the pond.
4. This is a shallow, naturally eutrophic beaver pond that drains an extensive wetland area and contains dark tea-colored water. There is no development around the shoreline.
5. Zooplankton, particularly the rotifer *Kellicottia*, were very abundant (the most of any pond in our database), indicating the high primary productivity (algal abundance) was moving up the food chain.

# Robbins Pond

Rindge

III-146

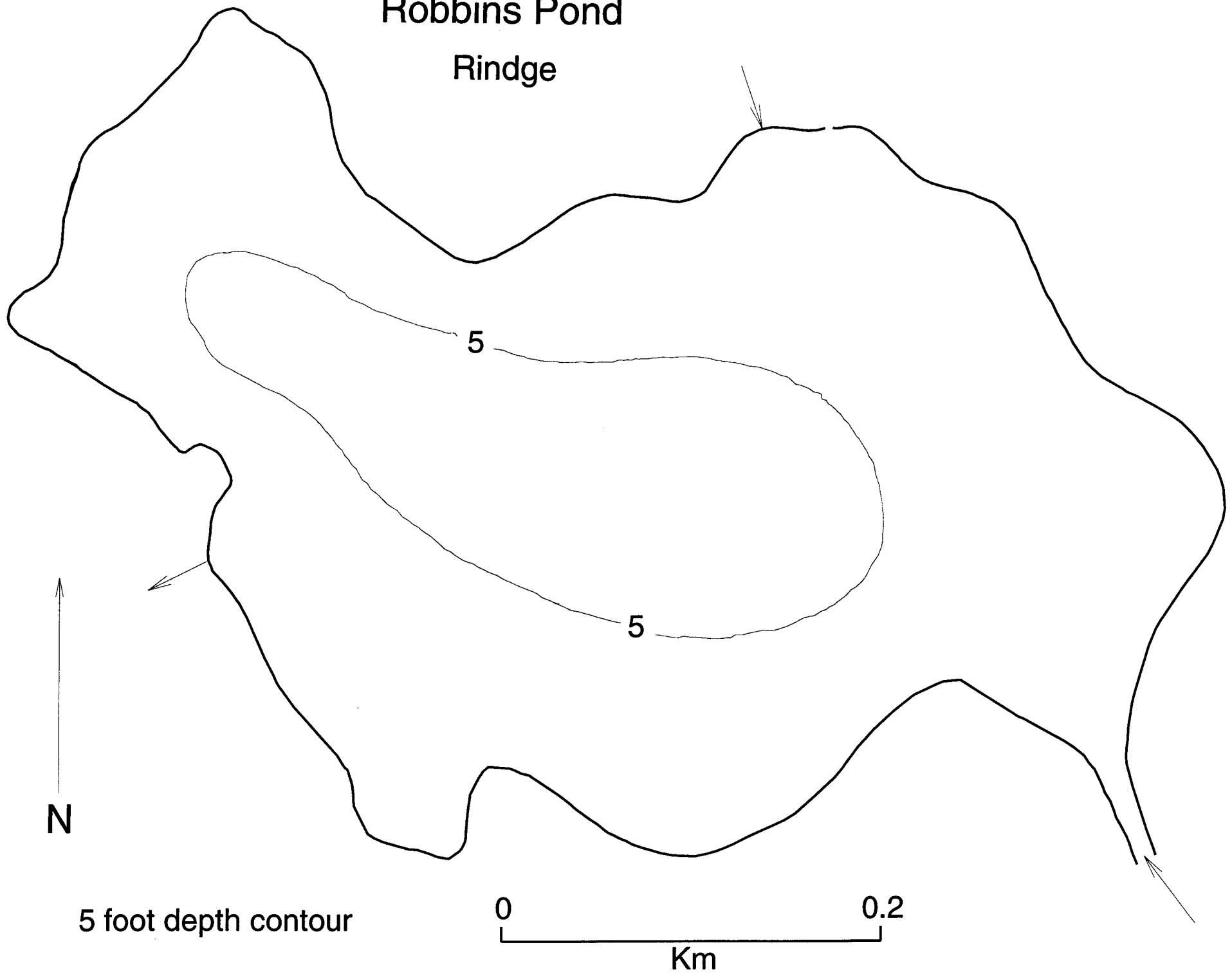
N

5 foot depth contour

0

Km

0.2



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# Robbins Pond

Rindge

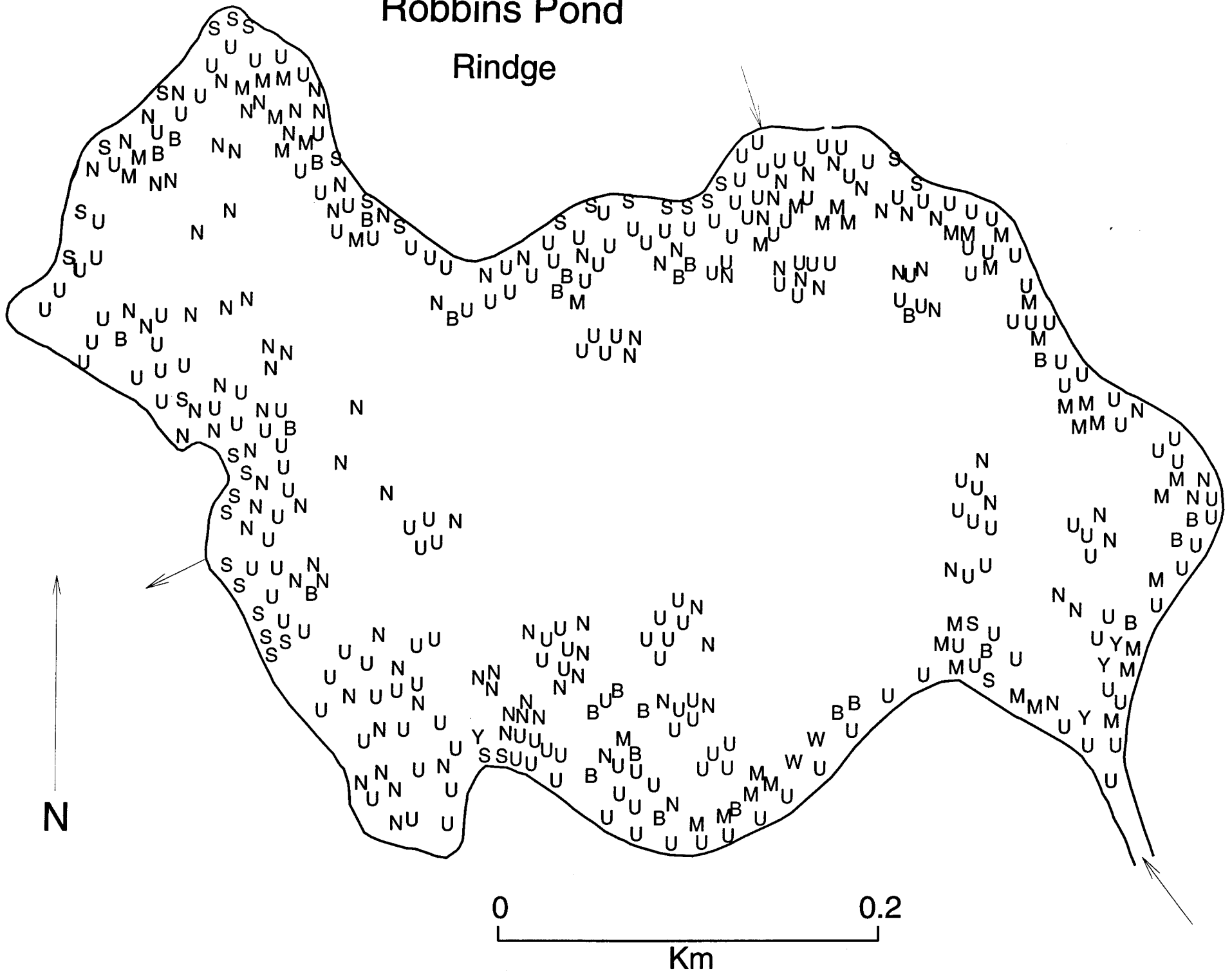
III-148

N

0

0.2

Km



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